REMARKS

Claims 1, 3, 4 and 12-17 are pending in this application. By this Amendment, claim 1 is amended solely for clarity and claim 11 is canceled without prejudice to, or disclaimer of, the subject matter recited therein. Reconsideration in light of the amendments and the following remarks and evidence is respectfully requested.

Entry of the amendments is proper under 37 CFR §1.116 because the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration as the amendments amplify issues previously discussed throughout prosecution; (c) satisfy a requirement of form asserted in the previous Office Action; and (d) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

The Office Action objects to claim 11 alleging that it is inconsistent with claim 3. Claim 11 is canceled, rendering the objection moot. Withdrawal of the objection is respectfully requested.

The Office Action rejects claims 1, 3, 4 and 11-17 under 35 U.S.C. §112, second paragraph. In particular, it is alleged that the claims are indefinite because it cannot be assessed what is encompassed by the recited same "type" of material. In this regard, the Examiner alleges that all of PP, PE, PET, HDPE, LDPE, PVC, EVOH, etc. could be considered in a same category of plastics but have different properties. Applicant respectfully disagrees.

When the "type of material" feature is read in light of the specification, it is clear from paragraphs [0005], [0006], [0011] and [0015] that the "type" refers to a classified waste disposal type so that both the body and label can be retained without separation for waste

disposal (recycling). To make this clarification more explicit, claim 1 is clarified consistent with its definition in the specification that the label is "of a same type of material as the container body for purposes of waste disposal classification."

Moreover, one of ordinary skill in the art of plastics and recycling would have readily understood this to be the different classifications of plastic types that can be recycled together. As evidence of such an understanding in the art, attached hereto is an Internet article merely for the purpose of showing the well-known classification of plastic "types" for purposes of waste disposal.

Claims 1, 3, 4, and 11-17 are concise and definite. Reconsideration and withdrawal of the rejection is respectfully requested.

The Office Action rejects claims 1, 3, 4, and 11-17 under 35 U.S.C. §103(a) over Japanese Patent Publication No. JP2003-335343 to Takuji in view of U.S. Patent No. 5,227,233 to Itaba.

Itaba is directed to a label that can be provided on a bottle. The label may include an adhesive layer. Itaba also teaches that the label may be of a same material as the bottle for recycling (col. 1, lines 25-35). However, Itaba does not teach a label provided over recesses to improve the strength of the container. Rather, Itaba's label is applied over a cylindrical body.

Takuji has a publication date of November 25, 2003, which is only one day prior to Applicant's earliest Japanese priority date of November 26, 2003. Applicant provides the attached executed §1.131 Declaration and Exhibits as evidence to antedate Takuji by establishing that Applicant invented the subject matter of the present claims earlier than Takuji.

In particular, the Declaration and Exhibits provide evidence of conception and reduction to practice of the claimed subject matter prior to Takuji's November 25, 2003

publication date, or at least establishes conception of the claimed subject matter, coupled with due diligence, prior to Takuji's earliest publication date.

In particular, the Declaration provides evidence of conception and actual reduction to practice of a container (in Exhibit B) prior to November 25, 2003 that is encompassed by the subject matter of independent claim 1. This actual reduction to practice was memorialized in a draft application dated November 12, 2003 (Exhibit A) and includes a table of experimental test results conducted prior to Takuji's November 25, 2003 publication date that confirm not only the existence of the container and the testing, but a recognition of the improvement in container rigidity of the claimed subject matter over a recessed container without a label, and a recessed container having a non-adhesively mounted label. Thus, for reasons explained in the executed Declaration, Applicant has demonstrated conception and actual reduction to practice prior to November 25, 2003.

Even further, the remaining evidence provided in the executed Declaration establishes conception prior to November 25, 2003, coupled with evidence of due diligence by Applicant and his counsel in preparation of a patent application from just prior to November 25, 2003 to Applicant's constructive reduction to practice (by filing of Applicant's Japanese priority application in Japan) on November 26, 2003.

Therefore, for the foregoing reasons, Applicant is entitled to an invention date that antedates Takuji, removing Takuji as prior art. Because the Office Action admits that Itaba alone is deficient in rendering the claimed subject matter obvious, the pending claims distinguish over the applied references. Withdrawal of the rejection is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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JAO:SPC/ccs

Attachments:
Internet Article
Rule 1.131 Declaration w/ Exhibits

Date: February 18, 2010

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Plastic Recycling Codes

Why bother about plastic recycling codes?

Here's why.

While plastic is a useful material found in many day-to-day products, it is non-biodegradable and it takes thousands for years for plastic to disintegrate and decompose. At the same time, disposing plastic through incineration releases much toxic gases into the environment.

Yet plastic products are produced and disposed of at an extremely rapid rat every second, especially now that many disposables like bottles, plates and bags are plastic in nature. Hence, the disposal of plastic is a potential sourc of serious pollution to the earth.

Fortunately, some types of plastic can be recycled and used to make new plastic. Here's a summary of the main types of plastic, their plastic recyclin codes, and their ability to be recycled.

Type 1 Plastic – Polyethylene Terephthalate (PET, PETE)

The acronym PETE (polyethylene terephthlate) or PET (poly ethylene terephthalate) are often used interchangeably, to refer to type 1 plastic. PE

or PETE plastics are often used in soft drink bottles, as well as food and nor food containers, because of their good gas and moisture barrier properties.

Examples of the recycling codes for PET and PETE plastic are seen below.

PET and PETE plastic can be recycled into carpet yarns, fiberfill, tote bags, food and drink containers, luggage and clothing.

Type 2 Plastic – High Density Polyethylene (HDPE)

The acronym HDPE (high density polyethylene) is often used to refer to typ 2 plastic. HDPE plastic is often used to make bottles for beverages with short shelf life, such as milk and juice. Because HDPE has good chemical resistance, it is also often used for containing household and industrial chemicals such as detergents and bleach. HDPE is also used to manufactur grocery and retain bags.

Examples of recycling codes for HDPE plastic are seen below. The "PE-HD" symbol is often used by plastic bag industries.

HDPE plastic can be recycled into bottles for holding household chemicals such as detergent, shampoo, conditioner and even motor oil. Recycled HDP plastic can also be made into pipes, buckets and bins, pens, flower pots, fil and sheets, benches, and even dog houses.

Type 3 Plastic -- Vinyl or Polyvinyl Chloride (PVC)

The acronym PVC (Polyvinyl Chloride or Vinyl) is used to refer to type 3 plastic. There are two types of PVC plastic. Rigid PVC are made into bottles and packaging sheet, as well as pipes and fittings, carpet backing and windows in the construction market. Given its stable electrical properties, flexible PVC are used in wire and cable insulation. Given its excellent chemical resistance, flexible PVC are also made into blood bags and medica tubing.

Examples of PVC plastic recycling codes can be seen below.

Recycled PVC can be made into packaging, mud flaps, film and sheet, floor tiles and mats, resilient flooring, trays, electrical boxes, cables, traffic cone garden hose.

Type 4 Plastic -- Low Density Polyethylene (LDPE)

The acronym LDPE (Low Density Polyethylene) is used to refer to type 4 plastic. Given its toughness, flexibility and relative transparency, LDPE plastic is often used in cable insulation, flexible bottles, as well as film applications. LDPE is also used extensively in manufacturing breadbags, tot bags, dry cleaning bags, furniture, carpets, and squeezable bottles.

Examples of LDPE plastic recycling codes can be seen below. The "PE-LD" recycling codes are often used by plastic bag manufacturers.

Recycled LDPE plastic can be made into garbage can liners, floor tile, film

and sheet, bins, landscape timber and lumber.

Type 5 Plastic -- Polypropylene (PP)

The acronym PP (Polypropylene) is used to refer to type 5 plastic. PP plastic is used extensively for packaging purposes. Given its high melting point and good chemical resistance, it is also used to contain hot-fill liquids, and molded in automotive parts. Examples of PP plastic recycling codes can be seen below.

Recycled PP plastic can be made into brooms, rakes, brushes, signal lights, ice scrapers, and trays.

Type 6 Plastic – Polystyrene (PS)

The acronym PS (Polystyrene) is used to refer to type 6 plastic. Given its clear and hard properties, PS plastic is often used in protective packaging, such as CD covers or cases. PS plastic can also be foamed, to be made into Styrofoam which are in turn made into disposable plates and cups and take away containers, etc.

Examples of PS plastic recycling codes can be seen below.

Recycled PS can be used in manufacturing rulers, license plate frames, foam packaging, foam utensils, plate and cups, vents, switch boards, and thermal insulation items.

Type 7 Plastic – Others

This plastic recycling code indicates that the type of plastic in question is made of a resin other than the six listed above, or is made of more than on resin listed above.

Are all types of plastic recyclable?

The ease of recycling the various types of plastic differs.

Type 1 plastic (PET and PETE) and Type 2 plastic (HDPE) are easy to recycl and poses low risk of leaching breakdown products.

Type 3 plastic (PVC) contains chlorine, and hence, in its manufacture, as well as its disposal (eg. incineration), highly dangerous and toxic gases are released. Hence, type 3 plastic are rarely recycled.

Type 4 plastic (LDPE) are historically not accepted by most American curbside recycling programs. Nevertheless, more and more communities ar starting to accept it these days.

Type 5 plastic (PP) are also gradually becoming more accepted by recyclers

Type 6 plastic (PS), such as Styrofoam, leach toxins and are very difficult t recycle.

Given the high cost of recycling, type 3 to 7 plastics are rarely recycled.

If you wish to make a difference to the environment, what these informatio mean is that you should try to send your Type 1 and 2 plastics for recycling as much as possible. You should also try to reduce your consumption of Type 3 to 7 plastics, in view that toxins are usually released in their production, use and disposals.

Read more about the process of recycling plastic, as well as other interestir facts about recycling plastic!

Return from this page on **Plastic Recycling Codes** to page on **Interestin Recycling Facts**

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